

## CLAIMS

What is claimed is:

1. A method for measuring the infiltration of coring fluid into a core sample taken from a formation, comprising:
  - a) providing a coring fluid containing cesium in a first concentration;
  - b) using said coring fluid and a coring means to generate the core sample;
  - c) determining the concentration of cesium present in the core sample; and
  - d) comparing the core sample cesium concentration to the first concentration.
2. The method according to claim 1, further including the step of using the results of the comparison in step d) to calculate the degree of infiltration of the coring fluid into the core sample.
3. The method according to claim 1 wherein step c) is performed using ICP-MS.
4. The method according to claim 1 wherein step c) includes disaggregation or centrifugation.
5. The method according to claim 1 wherein the cesium concentration in the coring fluid is between 25 ppb and 250 ppm.
6. The method according to claim 1 wherein the cesium concentration in the coring fluid is between 25 ppb and 125 ppm.
7. The method according to claim 1 wherein the cesium concentration in the coring fluid is at least 25 ppm.
8. The method according to claim 1, further including using cesium as a weighting agent in the coring fluid.
9. The method according to claim 1, further including using a device for reducing the amount of coring fluid that infiltrates the core sample during step b).

10. The method according to claim 1 wherein step c) includes using a displacing fluid to displace fluid from the core sample.

11. A method for measuring the infiltration of coring fluid into a core sample taken from a formation, comprising:

- a) providing a coring fluid containing cesium in a first concentration;
- b) using said coring fluid and a coring means to generate the core sample;
- c) determining the concentration of cesium present in the core sample;
- d) comparing the core sample cesium concentration to the first concentration; and
- e) using the results of the comparison in step d) to calculate the degree of infiltration of the coring fluid into the core sample.

12. The method according to claim 11 wherein step c) is performed using ICP-MS.

13. The method according to claim 11 wherein step c) includes disaggregation or centrifugation.

14. The method according to claim 11 wherein the cesium concentration in the coring fluid is between 25 ppb and 250 ppm.

15. The method according to claim 11 wherein the cesium concentration in the coring fluid is between 25 ppb and 125 ppm.

16. The method according to claim 11 wherein the cesium concentration in the coring fluid is at least 25 ppm.

17. The method according to claim 11, further including using cesium as a weighting agent in the coring fluid.

18. The method according to claim 11, further including using a device for reducing the amount of coring fluid that infiltrates the core sample during step b).

19. The method according to claim 11 wherein step c) includes using a displacing fluid to displace fluid from the core sample.